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Mental Well-Being of Caring Profession Students: Relationship with Caregiver Identity, Self-Compassion, and Intrinsic Motivation

## Reference

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## **Abstract**

### **Aims**

To assess mental well-being in a sample of UK caring profession students and explore the relationship between mental well-being, psychological distress, caregiver role identity, self-compassion, and motivation.

### **Background**

Students of caring profession subjects in UK universities typically follow a demanding educational and clinical training curriculum. Consequently, compared to other UK student groups, levels of psychological distress and mental illness are high.

### **Design**

A cross-sectional observational study was conducted during the 2016-2017 academic year.

### **Methods**

UK caring profession students (n=116) completed measures assessing mental well-being, psychological distress, caregiver role identity, self-compassion, and motivation. Significant correlations and independent predictors of mental well-being and psychological distress were identified.

### **Results/Findings**

The current sample of UK caring profession students had low levels of mental well-being and two-thirds were deemed to have severe levels of psychological distress. Mental well-being and psychological distress were negatively associated with role identity, and positively associated with self-compassion and intrinsic motivation. Role identity, self-compassion and intrinsic motivation were significant independent predictors of mental well-being and psychological distress.

## Conclusion

This study accords with other studies reporting that levels of psychological distress and mental illness are high amongst UK caring profession students. Findings suggest role identity, self-compassion, and intrinsic motivation are key factors that influence the mental well-being of this student group. Further research is warranted to determine whether adjusting the training curriculum to change how students identify with their caregiver role, as well as improve student levels of self-compassion and intrinsic motivation, leads to improvements in mental well-being and academic completion.

*Keywords: mental well-being, caring profession, nurse, social worker, self-compassion, role identity, intrinsic motivation, psychological distress, students*

## SUMMARY STATEMENT

### **Why is this research needed?**

- Compared to other student groups, UK caring profession students have low levels of mental well-being which can lead to non-completion and poor academic performance.
- Research demonstrates that role identity, self-compassion, and intrinsic motivation are key factors that influence mental well-being. However, the relationship between these three factors and mental well-being has not been investigated in a UK caregiver student population.

### **What are the key findings?**

- The current sample of UK caring profession students had low levels of mental well-being and two-thirds were deemed to have severe levels of psychological distress.
- Role identity, self-compassion, and intrinsic motivation were significantly related to mental well-being and psychological distress.
- Role identity, self-compassion, and intrinsic motivation were also significant independent predictors of mental well-being and psychological distress.

### **How should the findings be used to influence policy/practice/research/education?**

- Modifying the training curriculum to change how students identify with their caregiver role, as well as to improve student levels of self-compassion and intrinsic motivation, may lead to improvements in mental well-being and academic completion in UK caring profession students.

## INTRODUCTION

Caring profession subjects are one of the most popular subjects studied in UK universities.

Indeed, out of the 700,000 students that applied to UK undergraduate programmes in 2014, more than 55% applied to caring profession programmes (McGhee, 2015). Furthermore, out of the 2.3 million students enrolled in the UK at either undergraduate or postgraduate level during the 2015-2016 academic year, more than 20% were studying caring profession subjects (Higher Education Statistics Agency, 2017). This is different from countries such as the US and Japan where business (accounting for 20% of all applications in the US; The Institute of Education Sciences, 2016) and social science (accounting for 33% of all university students enrolled in Japan; Ministry of Education, Culture, Sports, Science and Technology-Japan, 2015) reflect the most popular university subjects, respectively.

Caring professions encompass jobs in which humans take care of other humans, whether physically, mentally, emotionally or spiritually. Examples of such professions include the allied health professions (e.g. occupational therapy, physiotherapy), counselling, clinical psychology, nursing, social work, and teaching (Hugman, 2005). One notable advantage of studying a caring profession subject at a UK university is good graduate prospects. Indeed, about 90% of healthcare graduates attain professional level employment or move onto further study within six months of graduation (The Complete University Guide, n.d.; Prospect, 2015). However, despite the popularity of the subject in UK universities, levels of mental well-being in UK caring profession students are relatively low. For example, UK nursing students are more stressed than students studying any other subject (Por, 2005), and more than one third of social work students have high levels of depression and/or are at risk for clinical depression (Horton, Diaz, & Green, 2009). These figures are clearly a cause for concern for higher education establishments because

amongst other negative consequences, poor mental well-being is associated with reduced academic achievement and programme non-completion (e.g. Eisenberg, Golberstein, & Hunt, 2009; Poh Keong, Chee Sern, Ming, & Che, 2015). Understanding the key factors that influence the mental health of caring profession students in the UK is important and will contribute to the provision of training programmes that better serve the needs of this student group.

## **Background**

Caring profession students typically follow a demanding educational and clinical training curriculum that involves being confronted with potentially stressful experiences both at university and during professional placement schemes (Morrisette, 2004; Tully, 2004).

Therefore, it is unsurprising that 70% of UK professional nursing students have high levels of psychological distress (Jones & Johnston, 1997), and that nursing students – including in countries outside the UK – often require psychological support or counselling to cope with their training-related emotional problems (Omigbodun, Onibokun & Yusuf, 2004). It is well established that psychological distress fosters sickness absence as well as poor academic performance (Deary, Watson, & Hogston, 2003; Eisenberg, Golberstein, & Hunt, 2009; Jones, Smith, & Johnston, 2005; Poh Keong et al., 2015). Indeed, a 2008 survey (n=4,500) by the Royal College of Nursing (RCN) revealed that 44% of UK nursing students had considered leaving the course, and that of this 44%, the majority believed their tutors were unaware of their intentions (RCN, 2008). Concerning reports also exist for social work students' in which approximately 4% report having recently had depression-related suicidal thoughts (Horton et al., 2009).

In line with the reported association between caregiver role identity and mental well-being (Mlotshwa et al., 2015), caring profession students often fail to recognise their mental

health problems because of their strong identity as a caregiver (Deutsch, 1985; Kottler & Hazler, 1996; Nace, 1995; Thoreson, Nathan, Skorina, & Kilburg, 1983). Role identity theory (McCall & Simmons, 1978) claims that behaviour is shaped by perceptions of self in personal and professional roles, and workers in caring professions have multiple professional and personal identities (Brody, 2010) that define how they should behave (e.g. helper, manager, assessor and coordinator of services, mediator, etc.). The lack of synergy between their ideal image of themselves as a caregiver and their mental health problems could explain why some caring professionals find it difficult to acknowledge that they have similar problems to their clients or the people they support (Siebert & Siebert, 2005). Furthermore, being unaware of their mental health problems is likely to hinder mental well-being (Corrigan, Druss, & Perlick, 2014; Jorm, 2012). However, despite these reported associations in professional caregivers, no study to date has explored correlations between role identity and mental well-being in a UK student caregiver population.

Self-compassion, that corresponds to caring and offering comfort to oneself in times of difficulty (Neff, 2003), is also related to mental well-being (Beaumont et al., 2012; Beaumont & Hollins Martin, 2013, 2015; Gilbert, 2009; Hutcherson et al., 2008; Kelly et al., 2009; Leary et al., 2007; Lutz et al., 2008; Neff, 2003; Neff et al., 2005). While a strong caregiver identity may cause caring profession students to overlook their own mental health problems, self-compassion helps them to acknowledge, accept and seek to alleviate these problems (Gilbert, 2009). However, although a recent study (Beaumont et al., 2016) reported a positive relationship between self-compassion and mental well-being in midwifery students, no studies to date have explored this relationship in other caring profession students in the UK.

In addition to role identity and self-compassion, intrinsic motivation is also known to be a determinant of mental well-being (Amabile, Goldfarb, & Brackfield, 1990; Baard, Deci, & Ryan, 2004; Bailey & Phillips, 2016; Ilardi et al., 1993; Locke & Latham, 2004; Miller & Rollnick, 2002). Intrinsic motivation is a key component of self-determination theory (SDT), a prevalent theory of motivation. SDT assumes that human beings have a natural inclination to integrate their psychic elements into a sense of self and larger social structures (Deci & Ryan, 1985). SDT distinguishes intrinsic from extrinsic forms of motivation and explicates that intrinsic motivation underlies activities undertaken due to being inherently interesting and satisfying, while extrinsic motivation underlies activities undertaken for instrumental reasons such as money or status. Intrinsic motivation is associated with goal achievement (Sheldon & Elliot, 1998), better task performance (Amabile et al., 1990; Baard et al., 2004; Miller & Rollnick, 2002), well-being (Bailey & Phillips, 2016; Ilardi et al., 1993), job and life satisfaction (Locke & Latham, 2004), volunteering, and prosocial behaviour (Gagne, 2003). Conversely, external motivation is associated with negative consequences (Vallerand & Ratelle, 2002) including emotional exhaustion (Houkes, Janssen, de Jonge, & Bakker, 2003), depression (Blais, Lachance, Vallerand, Briere, & Riddle, 1993), and compromised task performance due to low concentration and memory impairment (see Vallerand, 1997 for a review). Although previous studies have reported that caring profession students' intrinsic motivation is related to academic performance (Khalaila, 2015) and meaningfulness (Utvaer, 2014), no study to date has explored the relationship between intrinsic motivation and mental well-being in UK caring profession students.



## THE STUDY

### **Aims**

The current study assessed levels of mental well-being and psychological distress (depression, anxiety, and stress) in a sample of UK caring profession students. The study then investigated the relationship between mental well-being, psychological distress, role identity, self-compassion and intrinsic motivation in the same group of participants. Finally, an analysis was conducted to establish whether role identity, self-compassion and intrinsic motivation independently predict levels of mental well-being and psychological distress. This study focused on depression, anxiety, and stress as indices of psychological distress because these are the most common types of mental health problems in UK university students (Aronin & Smith, 2016).

### *Research questions*

1. What proportion of the current sample of UK caring profession students have below-average mental well-being and severe or worse levels of psychological distress?
2. How do mental well-being and psychological distress relate to caregiver role identity, self-compassion, and intrinsic motivation in the same participant group?
3. Are any of these variables (i.e., role identity, self-compassion, and intrinsic motivation) significant independent predictors of mental well-being and mental health?

### **Design**

A cross-sectional observational study was conducted during the 2016-2017 academic year (data collected between April and July 2017).

## **Participants**

Caring profession students studying at the researchers' university were recruited. The inclusion criteria were aged 18 years or older and in full-time education in a caring profession subject. A total of 120 UK students agreed to participate, and 116 completed the five assessment measures outlined below (101 female, 15 male; 103 social work students, 13 nursing students). This satisfied the required sample size of 114 based on statistical power calculations (Faul, Erdfelder, Buchner, & Lang, 2009).

## **Data collection and rigor**

After consenting to partake to the study, participants were sent links to the following scales:

*The Warwick-Edinburgh Mental Well-being Scale (WEMWBS)*. This scale uses fourteen positively worded items (e.g. 'I've been feeling optimistic about the future') with five response categories. It assesses subjective mental well-being and psychological functioning for the previous two weeks. It defines mental well-being as psychological functioning (sense of autonomy, self-acceptance, personal growth, life purpose, and self-esteem), satisfaction in life, and the ability to nurture reciprocal relationships (Stewart-Brown & Janmohamed, 2008). Each item is scored from 1 ('None of the time') to 5 ('All of the time') and total scores range from 14 to 70. The average score for a general population sample (n=1749) of Scottish people aged 16 to 74 was 50.7 (Stewart-Brown & Janmohamed, 2008). The Cronbach's alpha has been reported as .90, indicating high reliability (Tennant, Joseph, & Stewart-Brown, 2007).

*Depression Anxiety and Stress Scale (DASS-21)*. This 21-item, four-point Likert scale is a short-form version of the DASS-42 (Lovibond & Lovibond, 1995) and was used to measure psychological distress. It consists of three seven-item subscales; depression (e.g. 'I felt that I had

nothing to look forward to'), anxiety (e.g. 'I felt I was close to panic') and stress (e.g. 'I found it difficult to relax'). Cronbach's alphas for the DASS-21 subscales have been reported as .94 for depression, .87 for anxiety and .91 for stress (Antony, Bieling, Cox, Enns, & Swinson, 1998).

*Role Identity Scale (RIS)*. This eight-item self-report measure evaluates participants' caregiver role identity by considering how they view themselves as a caregiver, and how they perceive others' view of them as a caregiver (Siebert & Siebert, 2005; 2007). Participants score how much they agree or disagree with each item (e.g. 'It is my responsibility to be helpful to family and friends') on a five-point Likert scale. A higher summed score indicates a more prominent caregiving identity. Cronbach's alpha has been reported as .78 (Siebert & Siebert, 2005).

*Self-Compassion Scale-Short Form (SCS-SF)*. This self-report measure is an abridged version of the Self-Compassion Scale and comprises 12 five-point Likert items (Neff, 2003). The scale defines self-compassion as being compassionate to oneself when experiencing suffering (Neff, 2003). The Cronbach's alpha has been reported as .86, indicating good reliability (Raes, Pommier, Neff, & Gucht, 2011).

*Academic Motivation Scale (AMS)*. This 28-item self-report measure evaluates the levels of seven different types of motivation: amotivation, three types of extrinsic motivation (external, introjected, and identified regulation), and three types of intrinsic motivation (to know, to accomplish, and to experience stimulation). Amotivation (AM), the lowest type of motivation, corresponds to not being motivated at all, and an amotivated student remains disinterested in terms of the outcome that arises from their academic input (Deci & Ryan, 1985). The next lowest form of motivation is extrinsic motivation external regulation (EMER), which relates to being driven by reward or punishment (e.g., studying in order to avoid being reprimanded by one's

parents). Extrinsic motivation with introjected regulation (EMIJ) is an internalised form of EMER (e.g., studying because one believes that is what good students are supposed to do). A student with extrinsic motivation with identified regulation (EMID) recognises the value of a behaviour, and chooses to implement the behaviour without relying on other external drivers (e.g., studying because one believes it is important to do so) (Deci, 1975; Deci & Ryan, 1985; Vallerand et al., 1992).

The next highest level of motivation following EMER, EMIJ, and EMID (i.e., which are all extrinsic forms of motivation) is intrinsic motivation to experience stimulation (IMS) that corresponds to engaging in an activity to experience stimulating sensations. Flow and peak experience (e.g. Csikszentmihalyi, 1975) might be considered similar to an experience of IMS. Intrinsic motivation towards accomplishments (IMA) refers to the desire to create something unique as well as the pleasure that arises from pursuing this goal (e.g., going the extra mile on an assessment paper to accomplish something unique). IMA is similar to mastery motivation in educational psychology (Harter, 1981). The final form of intrinsic motivation (i.e., in addition to IMS and IMA) is intrinsic motivation to know (IMK). It relates to several educational concepts such as exploration, curiosity and learning goals (e.g. Gottfried, 1985; Harter, 1981), and embodies the epistemic need to search for meaning (Vallerand, Blais, Briere, & Pelletier, 1989). A student with IMK may read books for the sheer pleasure of learning something new (Deci, 1975; Deci & Ryan, 1985; Vallerand, 1992). Each type of motivation is assessed using four items on a seven-point Likert scale (from 1 = 'Does not correspond at all' to 7 = 'Corresponds exactly'). All of the subscales have adequate Cronbach's alphas between .62 and .91 (Vallerand et al., 1992).

## **Ethical considerations**

Ethics approval was obtained from the University Research Ethics Committee.

## **Data analysis**

Data was screened for the assumptions of parametric tests and descriptive statistics were then calculated. Pearson's correlations were calculated prior to conducting a multiple regression analyses in order to examine the best independent predictors of mental well-being and psychological distress. All statistical analysis was conducted using IBM SPSS version 24.0.

## **RESULTS**

Study participants (n=116) ranged in age from 18 to 58 years old (mean = 30.5, SD = 8.81 years) with 26% undertaking postgraduate study and 10% classed as international students (3 students from Europe and 9 from African countries). A total of 23% of participants did not have any placement experience (the mean placement experience for the remaining students was 9 months) and 45% did not have a part-time job. The mean reported weekly self-study time was 13 hours.

Four scores in RIS and two scores in DASS-21 were identified as outliers using the outlier labelling rule (Hoaglin & Iglewicz, 1987), and were subsequently winsorised (Turkey, 1962). Skewness values ranged from -1.19 to 1.15, and Kurtosis values from -.38 to 3.06. The Cronbach's alpha for all of the scales and subscales were .75 or higher, demonstrating high levels of internal consistency. As shown in Table 1, the mean score of mental well-being in our participants (45.01) was lower than the comprehensive Scottish sample (Stewart-Brown & Janmohamed, 2008) and 30% of participants had below average levels of mental-wellbeing; 41%

had severe or higher levels of depression, and 63% had severe or higher levels of anxiety and stress.

*Table 1 Descriptive statistics: mental well-being, psychological distress, role identity, self-compassion, motivation among caring profession students*

Scale/subscale (Range)	N	M	SD	$\alpha$	
MW (14-70)	116	45.01	9.56	.93	30% below average
Dpn (0-21)	116	10.33	7.14	.87	41% severe or worse
Anx (0-21)	116	10.41	7.80	.84	63% severe or worse
Strs (0-21)	116	15.71	8.53	.84	63% severe or worse
RI (8-40)	116	31.34	5.79	.85	
SC (12-60)	116	32.84	8.37	.85	
IMK (4-28)	116	20.54	5.27	.90	
IMA (4-28)	116	18.31	5.53	.84	
IMS (4-28)	116	15.11	5.55	.86	
EMID (4-28)	116	21.84	4.02	.84	
EMIJ (4-28)	116	20.15	5.65	.86	
EMER (4-28)	116	19.84	5.56	.80	
AM (4-28)	116	7.05	3.96	.75	

MW = Mental well-being; Dpn = Depression; Anx = Anxiety; Strs = Stress; RI = Role identity; SC= Self-compassion; IMK = Intrinsic motivation to know; IMA = Intrinsic motivation toward accomplishment; IMS = Intrinsic motivation to experience stimulation; EMID = Extrinsic motivation identified; EMIJ = Extrinsic motivation introjected; EMER = Extrinsic motivation external regulation; AM = Amotivation.

### *Correlations*

All of the scales and subscales, except for mental well-being and self-compassion, were not normally distributed, as assessed by the Shapiro-Wilk's test ( $p < .05$ ). Thus, they were square-root-transformed to satisfy the assumption of normality. As shown in Table 2, mental well-being

was positively related to self-compassion and intrinsic motivation, and negatively related to mental health problems and amotivation. Psychological distress was positively related to role identity and amotivation, and negatively related to self-compassion and self-study time.

Furthermore, role identity was negatively related to sleeping time, and self-compassion was positively related to intrinsic motivation, age and self-study time, and negatively related to amotivation. The level of the academic programme was positively related to extrinsic motivation, and negatively related to amotivation.

*Table 2. Correlations among the mental well-being, psychological distress, role identity, self-compassion, motivation measures, and demographics*

	MW	1	2	3	4	5	6	7	8	9	10	11	12
1.Dpn	-.57**	-											
2.Anx	-.38**	.61**	-										
3.Strs	-.46**	.69**	.76**	-									
4.RI	-.10	.14	.27**	.38**	-								
5.SC	.56**	-.46**	-.32**	-.47**	-.16	-							
6.IMK	.41**	-.12	-.01	.02	-.02	.34**	-						
7.IMA	.29**	-.06	.03	.08	.13	.29**	.78**	-					
8.IMS	.24**	-.04	.10	.002	-.01	.33**	.65**	.61**	-				
9.EMID	.17	.14	.04	.13	.004	.06	.63**	.54**	.49**	-			
10.EMIJ	.07	-.004	.08	.09	.08	-.01	.53**	.70**	.34**	.43**	-		
11.EMER	.02	.17	-.01	.05	-.05	-.04	.29**	.37**	.10	.56**	.54**	-	
12.AM	-.22*	.22*	.19*	.07	-.09	-.20*	-.32**	-.21*	-.02	-.19*	-.12	.09	-
GN	-.01	-.004	.09	.09	.06	-.05	.16	.14	.10	.18	.19*	.11	.002
Age	.18	-.11	-.15	-.19*	-.03	.36**	.19*	.15	.13	-.10	-.07	-.20*	.003
PrgLv	.07	-.03	.004	-.07	.11	.02	-.12	-.18	-.03	-.18	-.29**	-.23*	.22*
Plcmt	.02	.08	.11	.07	.09	.10	-.04	-.07	-.04	-.06	-.27**	-.13	-.13
SelfStdy	.08	-.25**	-.16	-.23*	.02	.30**	.01	0.13	0.13	-.18*	.09	-.14	-.12
Sleep	.18	-.07	-.15	-.18*	-.23*	-.13	.15	.07	.02	.15	.17	.18	-.11
PTjob	.09	-.09	-.07	-.09	-.05	.14	.10	.16	.26**	-.02	.08	-.08	.07
WorkHr	-.001	.08	.01	-.01	-.02	-.03	-.06	-.11	-.13	.02	-.06	.01	-.11

MW = Mental well-being; Dpn = Depression; Anx = Anxiety; Strs = Stress; RI = Role identity; SC= Self-compassion; IMK = Intrinsic motivation to know; IMA = Intrinsic motivation toward accomplishment; IMS = Intrinsic motivation to experience stimulation; EMID = Extrinsic motivation identified; EMIJ = Extrinsic motivation introjected; EMER = Extrinsic motivation external regulation; AM = Amotivation; GN = Gender (1=male, 2=female); ProgLv = Programme level they are entoled to; Plcmt = how many months they have worked in placement; SelfStdy = weekly self-study hours; Sleep = Sleep hours per day; WorkHr = working hours per week in their parttime job. \* $p < .05$ ; \*\* $p < .01$ .

### *Regression*

Multiple regression analyses were conducted to explore the relative contribution of role identity, self-compassion, and intrinsic motivation to mental well-being and psychological distress. At



step one, gender and age were entered to statistically adjust for their effects, and at step two, all the scores for role identity, self-compassion, and motivation were imputed. Because of the many predictor variables, adjusted coefficient of determination ( $\text{Adj. } R^2$ ) was reported.

Multicollinearity was not a concern as all the VIF values were less than 10.

As shown in Table 3, role identity, self-compassion, and intrinsic motivation predicted 30% of the variance for mental wellbeing after adjusting for demographic information (self-compassion and intrinsic motivation were identified as independent predictors). Role identity, self-compassion, and intrinsic motivation predicted 29% of the variance for depression after adjusting for demographic information (self-compassion was the only independent predictor). Role identity, self-compassion, and motivation predicted 14% of the variance for anxiety after adjusting for demographic information (role identity, self-compassion, and intrinsic motivation toward accomplishment were each independent predictors). Finally, role identity, self-compassion, and motivation predicted 30% of the variance for stress after adjusting for demographic information (role identity and self-compassion were independent predictors).

*Table 3 Multiple regression: Mental well-being and psychological distress as predicted by role identity, self-compassion, and motivation in UK caring profession students*

	Well-being			Depression			Anxiety			Stress		
	B	SE <sub>B</sub>	β	B	SE <sub>B</sub>	β	B	SE <sub>B</sub>	β	B	SE <sub>B</sub>	β
Step 1												
Gender	-.20	2.63	-.01	-.03	.36	-.01	.35	.38	.09	.30	.34	.08
Age	.19	.10	.18	-.02	.01	-.11	-.02	.02	-.15	-.03	.01	-.19*
Adj. R <sup>2</sup>		.02			.01			.01			.01	
Step 2												
Gender	-.63	2.26	-.02	-.19	.32	-.05	.15	.37	.04	.05	.30	.01
Age	-.07	.10	-.06	.01	.01	.09	-.02	.02	-.10	-.01	.01	-.07
RI	-.19	1.43	-.01	.18	.20	.08	.59	.23	.23*	.65	.19	.29**
SC	.55	.11	.49**	-.07	.02	-.48**	-.05	.02	-.29**	-.07	.01	-.49**
IMK	5.95	2.36	.39*	-.30	.34	-.15	.21	.38	.10	.20	.31	.10
IMA	-.18	2.20	-.01	-.19	.31	.10	-.06	.36	-.03**	.37	.29	.21
IMS	-1.63	1.48	-.13	.15	.21	.09	.31	.24	.17	-.01	.20	-.01
EMID	.04	2.57	.002	.51	.37	.19	-.04	.42	-.01	.22	.34	.08
EMIJ	-.96	1.80	-.07	-.32	.26	-.17	.08	.29	.04	-.24	.24	-.13
EMER	-.38	1.64	-.03	.28	.23	.15	-.19	.27	-.10	-.12	.22	-.07
AM	-.14	1.29	-.01	.19	.18	.10	.39	.21	.19	.15	.17	.08
Δ Adj.R <sup>2</sup>		.30			.29			.14			.30	

MW = Mental well-being; Dpn = Depression; Anx = Anxiety; Strs = Stress; RI = Role identity; SC= Self-compassion; IMK = Intrinsic motivation to know; IMA = Intrinsic motivation toward accomplishment; IMS = Intrinsic motivation to experience stimulation; EMID = Extrinsic motivation identified; EMIJ = Extrinsic motivation introjected; EMER = Extrinsic motivation external regulation; AM = Amotivation; B = unstandardised regression coefficient; SE<sub>B</sub> = standard error of the coefficient; β = standardised coefficient; \* $p < .05$ ; \*\* $p < .01$ .

## DISCUSSION

This study assessed levels of mental well-being and psychological distress among a sample of UK caring profession students. Relationships between mental well-being, psychological distress, role identity, self-compassion and intrinsic motivation were also investigated. Findings demonstrated that approximately one third of the current sample of caring profession students had below average levels of mental well-being, and two-thirds had severe or worse levels of psychological distress. Mental well-being and psychological distress were related to self-compassion, intrinsic motivation, and amotivation. Furthermore, multiple regression analyses revealed that role identity, self-compassion, and intrinsic motivation were significant predictors of mental well-being and psychological distress.

Poor levels of mental well-being and a high prevalence of psychological distress in the current sample of UK caring profession students is consistent with findings from other studies (Horton et al., 2009; Jones & Johnston, 1997; Por, 2005). However, compared to a previous study that reported 77% of UK students (of all subject disciplines) suffered from depression, 74% from anxiety, and 63% from stress (Aronin & Smith, 2016), only 41% of participants in the current study suffered from depression (the rate of both anxiety and stress in the present study was 63%). This relatively lower occurrence of depression may be explained by (i) the peer group effects derived from studying with peers that aspire to help others, and (ii) the fact that students prefer disclosing their mental distress to peers rather than to a professional (Kalafat & Elias 1995, Hope et al., 2005) or family member (Ciarrochi et al., 2003). Indeed, a strong negative correlation has been observed between peer support and depression in nursing and midwifery students in Ireland (Horgan, Sweeney, Behan, & McCarthy, 2016).

The relationship between mental well-being and role identity observed in the current study may be indicative of caring profession students' image of themselves as a future care worker, which could blind them to their own mental health issues (Siebert & Siebert, 2005). Reduced mental well-being is also likely to be caused by expectations or pre-conceived ideas concerning the demands of the caregiver role (Lev-Wiesel, 2003). In line with recommendations and findings by other researchers (Compton & Galaway, 1989; Fook, 1993; McKee, 2017; O'Connor, Wilson, & Setterlund, 2003), self-awareness training may be an effective means of addressing this issue by helping students become more aware of their values, mental health, attitudes, and personal issues, including how these might affect their caring work. Indeed, although this form of training is yet to be applied to UK caring profession students, self-awareness training has already been used in some caring profession programmes in other countries (Australian Association of Social Workers, 1994).

The positive relationship observed between mental well-being and self-compassion is likewise consistent with previous research findings (Braehler et al., 2013; Gilbert & Procter 2006; Kelly et al. 2009). For example, self-compassion has been shown to be negatively associated with depression, anxiety and self-criticism in individuals with chronic psychological distress (Gilbert & Procter 2006). Furthermore, self-compassion has previously been shown to predict mental wellbeing in non-student samples (Baer, Lykins, & Peters, 2012; Hollis-Walker & Colosimo, 2011; Van Dam, Sheppard, Forsyth, and Earleywine, 2011) as well as in students studying subjects other than those related to a caring profession (Bluth & Blanton, 2015). Consequently, there may be value in explicitly training students to cultivate self-compassion as part of caring profession training curriculums. In addition to direct training in self-compassion, another means of doing this could be to offer mindfulness training that was shown to

significantly increase levels of self-compassion in 31 caring profession students (Newsome, Waldo, & Gruszka, 2012) as well as in 21 post-graduate psychotherapy students (Dorian & Killebrew, 2014). Stickle (2016) appears to advocate the use of compassion and self-compassion as part of the training of caring professionals and posits that – irrespective of whether taught directly or elicited via techniques such as mindfulness – compassion and self-compassion honours caring profession's humanitarian roots.

The positive relationship observed in the current study between mental well-being and motivation likewise accords with previous research findings (Amabile et al., 1990; Baard et al., 2004; Bailey & Phillips, 2016; Ilardi et al., 1993; Locke & Latham, 2004; Miller & Rollnick, 2002). Furthermore, intrinsic motivation has previously been shown to be a significant independent predictor of mental wellbeing in Chinese medical undergraduate students (Huang, Lv, & Wu, 2016) as well as in non-student populations (Weinstein & Ryan, 2010; Zuroff et al., 2007). This relationship indicates that helping caring profession students derive personal meaning from their current training and anticipated professional role is likely to be a useful means of enhancing both intrinsic motivation and mental well-being. Dawes and Larson (2011) suggest that cultivating a sense of personal meaning could be achieved via nurturing a goal that transcends the individual's self-needs. For example, the Disney strategy, a dynamic Neuro-Linguistic Programming skill that considers dreams and plans (Dilts, 1998), could help students identify what they want internally from their studies and career (Kotera & Sheffield, 2017). Such a dynamic process could be introduced either as an adjunct or alternative to traditional classroom-based training approaches (Kotera, 2017).

## **Limitations**

There are several limitations to this study. A key limitation is the fact that participants were all either social work or nursing students, meaning that findings may not generalise to students studying other caring profession disciplines. A further limiting factor is that participants were recruited from a single academic institution which means that factors unique to the university (e.g., learning and assessment styles, teaching quality, student satisfaction, etc.) may have influenced the findings. Furthermore, as with all cross-sectional studies, the study was limited by the fact that it is not possible to ascertain the causal direction of the relationships identified.

## CONCLUSION

While the number of caring profession students in UK universities exceeds that of any other student group in the UK, the mental well-being of caring profession students is comparatively poor. Findings from this study suggest that role identity, self-compassion, and intrinsic motivation are key factors that influence the mental health of this student group. Consequently, further research is warranted to determine whether adjusting the training curriculum to change how UK caring profession students identify with their caregiver role, as well as to improve student levels of self-compassion and intrinsic motivation, leads to improvements in mental health and academic completion.

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